WHAT IS CLAIMED IS:

1   1. A method for adding a participant to a
2 conference call, said method comprising:
3   in response to a multipoint controller receiving a
4   request to extend an invitation to an ongoing
5   conference call to a first terminal:
6   establishing a Call Optimization Application
7   (COA) channel between a Multipoint
8   Controller-Call Optimization Application
9   (MC-COA) and a Call Optimization
10   Application co-resident with the first
11   terminal (Terminal-COA), said establishing
12   a COA channel effected via instant
13   messaging following an address resolution;
14   exchanging cost information data between the
15   Terminal-COA and the MC-COA;
16   determining an optimal media transport channel
17   origination strategy in response to the
18   cost information data;
19   sending the Terminal-COA an invitation to join
20   the conference call, said invitation
21   having associated information consonant
22   with the optimal media transport channel
23   origination strategy;
24   receiving, with the MC-COA, a message from the
25   Terminal-COA containing human user input
26   received in response to the invitation to
27   join; and
28   responding to the message containing the human
29   user input.

1   2.   The method of Claim 1, wherein said

2 establishing a Call Optimization Application (COA)

3 channel further includes:

4   obtaining a connection address of the terminal to be

5   added; and

6   associating the connection address with a non-media-

7   transport-channel-supporting connection

8   address, wherein the non-media-transport-

9   channel-supporting connection address includes

10   an instant messaging service identifier.

1   3.   The method of Claim 1, wherein said

2 establishing a Call Optimization Application (COA)

3 channel further includes:

4   establishing an instant messaging connection.

1   4.   The method of Claim 1, wherein said exchanging

2 cost information data between the Terminal-COA and the

3 MC-COA further includes:

4   gathering, with the Terminal-COA, cost information

5   related to the first terminal originating the

6   media transport channel.

1   5.   The method of Claim 1, wherein said exchanging

2 cost information data between the Terminal-COA and the

3 MC-COA further includes:

4   gathering, with the MC-COA, cost information related

5   to the multipoint controller originating the

6   media transport channel.

1   6.   The method of Claim 1, wherein said exchanging

2 cost information data between the Terminal-COA and the

3 MC-COA further includes:

4   sending, over the COA channel, cost information

5   related to the first terminal originating the

6   media transport channel.

1   7.   The method of Claim 1, wherein said determining

2 an optimal media transport channel origination strategy

3 in response to the cost information data further

4 includes:

5   the multipoint controller comparing cost

6   information.

1   8.   The method of Claim 1, wherein said sending the

2 Terminal-COA an invitation to join the conference call,

3 said invitation having associated information consonant

4 with the optimal media transport channel origination

5 strategy further includes:

6   sending a request that the first terminal originate

7   a media transport channel with the multipoint

8   controller, if it has been determined to be

9   most cost effective for the first terminal to

10   originate the media transport channel.

1   9.   The method of Claim 1, wherein said sending the

2 Terminal-COA an invitation to join the conference call,

3 said invitation having associated information consonant

4 with the optimal media transport channel origination

5 strategy further includes:

6   sending a request that the first terminal originate

7   a media transport channel with the multipoint

8   controller, unless specific instructions not to

9   send the request have been received.

1   10.   The method of Claim 1, wherein said sending the

2 Terminal-COA an invitation to join the conference call,

3   said invitation having associated information consonant

4   with the optimal media transport channel origination

5   strategy further includes:

6   sending a token having at least one field selected

7   from the group comprising a token ID field, a

8   conference ID field, a network address field, a

9   password field, a call initiator field, and an

10   other conference call participants' names

11   field.

1   11.   The method of Claim 1, wherein said receiving,

2   with the MC-COA, a message from the Terminal-COA

3   containing human user input received in response to the

4   invitation to join further includes:

5   receiving a message that the human user has rejected

6   the invitation.

1   12.   The method of Claim 1, wherein said responding

2   to the message containing the human user input further

3   includes:

4   sending a message from the MC-COA to the multipoint

5   controller informing the multipoint controller

6   that the invitation to join the conference call

7   has been rejected.

1   13.   The method of Claim 1, wherein said receiving,

2   with the MC-COA, a message from the Terminal-COA

3   containing human user input received in response to the

4   invitation to join further includes:

5   receiving a message that the human user has accepted

6   the invitation to join but has declined a

7   request to initiate a media transport channel.

1   14.   The method of Claim 13, wherein said responding
2   to the message containing the human user input further
3   includes:
4   sending a message from the MC-COA to the multipoint
5   controller informing the multipoint controller
6   that the multipoint controller is to originate
7   a media transport channel with the first
8   terminal, in response to the message that the
9   human user has accepted the invitation to join
10   but has declined a request to initiate a media
11   transport channel.

1   15.   The method of Claim 1, wherein said receiving,
2   with the MC-COA, a message from the Terminal-COA
3   containing human user input received in response to the
4   invitation to join further includes:
5   receiving a message that the human user has accepted
6   the invitation to join and has accepted a
7   request to initiate a media transport channel.

1   16.   The method of Claim 15, wherein said responding
2   to the message containing the human user input further
3   includes:
4   sending a message from the MC-COA to the multipoint
5   controller informing the multipoint controller
6   that the first terminal will be calling in "as
7   if" first terminal were joining a "meet-me"
8   conference call, in response to the message
9   that the human user has accepted the request to
10   initiate the media transport channel.

1   17.   The method of Claim 15, wherein said responding
2   to the message containing the human user input further
3   includes:

4   sending a message from the MC-COA to the multipoint

5   controller informing the multipoint controller

6   that the first terminal will be calling in and

7   authenticating itself with token information,

8   in response to the message that the human user

9   has accepted the request to initiate the media

10   transport channel.

1   18.   The method of Claim 17, wherein the token

2   information is unique to the first terminal and provides

3   a security mechanism such that access to the conference

4   call is controlled.

1   19. The method of Claim 15, wherein said responding

2 to the message containing the human user input further

3 includes:

4   sending a message from the MC-COA to the multipoint

5   controller informing the multipoint controller

6   that the first terminal will be calling in and

7   authenticating itself with token information,

8   and that the first terminal desires to bill the

9   call against another entity, in response to the

10   message that the human user has accepted the

11   request to initiate the media transport

12   channel.

1   20. A system comprising:

2   means, responsive to a multipoint controller

3   receiving a request to extend an invitation to

4   an ongoing conference call to a first terminal,

5   for:

6   establishing a Call Optimization Application

7   (COA) channel between a Multipoint

8   Controller-Call Optimization Application

9   (MC-COA) and a Call Optimization

10   Application co-resident with the first

11   terminal (Terminal-COA), said means for

12   establishing a COA channel effected via

13   instant messaging following an address

14   resolution;

15   exchanging cost information data between the

16   Terminal-COA and the MC-COA;

17   determining an optimal media transport channel

18   origination strategy in response to the

19   cost information data;

20   sending the Terminal-COA an invitation to join

21   the conference call, said invitation

22   having associated information consonant

23   with the optimal media transport channel

24   origination strategy;

25   receiving, with the MC-COA, a message from the

26   Terminal-COA containing human user input

27   received in response to the invitation to

28   join; and

29   responding to the message containing the human

30   user input.

1   21. The system of Claim 20, further comprising:

2   a network server computer having the system; and

3   said network server computer including at least one
4   processor and at least one memory.

1   22.   The system of Claim 20, wherein said means for
2   establishing a Call Optimization Application (COA)
3   channel further includes:
4   means for obtaining a connection address of the
5   terminal to be added; and
6   means for associating the connection address with a
7   non-media-transport-channel-supporting
8   connection address, wherein the non-media-
9   transport-channel-supporting connection address
10   includes an instant messaging service
11   identifier.

1   23.   The system of Claim 20, wherein said means for
2   establishing a Call Optimization Application (COA)
3   channel further includes:
4   means for establishing an instant messaging
5   connection.

1   24.   The system of Claim 20, wherein said means for
2   exchanging cost information data between the Terminal-COA
3   and the MC-COA further includes:
4   means for gathering, with the Terminal-COA, cost
5   information related to the first terminal
6   originating the media transport channel.

1   25.   The system of Claim 20, wherein said means for
2   exchanging cost information data between the Terminal-COA
3   and the MC-COA further includes:
4   means for gathering, with the MC-COA, cost
5   information related to the multipoint
6   controller originating the media transport
7   channel.

1   26.   The system of Claim 20, wherein said means for
2 exchanging cost information data between the Terminal-COA
3 and the MC-COA further includes:
4   means for sending, over the COA channel, cost
5   information related to the first terminal
6   originating the media transport channel.

1   27.   The system of Claim 20, wherein said means for
2 determining an optimal media transport channel
3 origination strategy in response to the cost information
4 data further includes:
5   means for the multipoint controller to compare cost
6   information.

1   28.   The system of Claim 20, wherein said means for
2 sending the Terminal-COA an invitation to join the
3 conference call, said invitation having associated
4 information consonant with the optimal media transport
5 channel origination strategy further includes:
6   means for sending a request that the first terminal
7   originate a media transport channel with the
8   multipoint controller, if it has been
9   determined to be most cost effective for the
10   first terminal to originate the media transport
11   channel.

1   29.   The system of Claim 20, wherein said means for
2 sending the Terminal-COA an invitation to join the
3 conference call, said invitation having associated
4 information consonant with the optimal media transport
5 channel origination strategy further includes:
6   means for sending a request that the first terminal
7   originate a media transport channel with the
8   multipoint controller, unless specific

9   instructions not to send the request have been

10   received.

1   30.   The system of Claim 20, wherein said means for

2   sending the Terminal-COA an invitation to join the

3   conference call, said invitation having associated

4   information consonant with the optimal media transport

5   channel origination strategy further includes:

6   means for sending a token having at least one field

7   selected from the group comprising a token ID

8   field, a conference ID field, a network address

9   field, a password field, a call initiator

10   field, and an other conference call

11   participants' names field.

1   31.   The system of Claim 20, wherein said means for

2   receiving, with the MC-COA, a message from the Terminal-

3   COA containing human user input received in response to

4   the invitation to join further includes:

5   means for receiving a message that the human user

6   has rejected the invitation.

1   32.   The system of Claim 20, wherein said means for

2   responding to the message containing the human user input

3   further includes:

4   means for sending a message from the MC-COA to the

5   multipoint controller informing the multipoint

6   controller that the invitation to join the

7   conference call has been rejected.

1   33.   The system of Claim 20, wherein said means for

2   receiving, with the MC-COA, a message from the Terminal-

3   COA containing human user input received in response to

4   the invitation to join further includes:

5   means for receiving a message that the human user

6   has accepted the invitation to join but has

7   declined a request to initiate a media

8   transport channel.

1   34.   The system of Claim 33, wherein said means for

2   responding to the message containing the human user input

3   further includes:

4   means for sending a message from the MC-COA to the

5   multipoint controller informing the multipoint

6   controller that the multipoint controller is to

7   originate a media transport channel with the

8   first terminal, in response to the message that

9   the human user has accepted the invitation to

10   join but has declined a request to initiate a

11   media transport channel.

1   35.   The system of Claim 20, wherein said means for

2   receiving, with the MC-COA, a message from the Terminal-

3   COA containing human user input received in response to

4   the invitation to join further includes:

5   means for receiving a message that the human user

6   has accepted the invitation to join and has

7   accepted a request to initiate a media

8   transport channel.

1   36.   The system of Claim 35, wherein said means for

2   responding to the message containing the human user input

3   further includes:

4   means for sending a message from the MC-COA to the

5   multipoint controller informing the multipoint

6   controller that the first terminal will be

7   calling in "as if" first terminal were joining

8   a "meet-me" conference call, in response to the

9   message that the human user has accepted the

10   request to initiate the media transport

11   channel.

1   37.   The system of Claim 35, wherein said means for

2   responding to the message containing the human user input

3   further includes:

4   means for sending a message from the MC-COA to the

5   multipoint controller informing the multipoint

6   controller that the first terminal will be

7   calling in and authenticating itself with token

8   information, in response to the message that

9   the human user has accepted the request to

10   initiate the media transport channel.

11   38.   The system of Claim 37, wherein the token

12   information is unique to the first terminal and provides

13   a security mechanism such that access to the conference

14   call is controlled.

1   39.   The system of Claim 35, wherein said means for

2   responding to the message containing the human user input

3   further includes:

4   means for sending a message from the MC-COA to the

5   multipoint controller informing the multipoint

6   controller that the first terminal will be

7   calling in and authenticating itself with token

8   information, and that the first terminal

9   desires to bill the call against another

10   entity, in response to the message that the

11   human user has accepted the request to initiate

12   the media transport channel.

13

1   40. A method for adding a participant to a

2 conference call, said method comprising:

3   in response to a multipoint controller receiving a

4   request to extend an invitation to an ongoing

5   conference call to a first terminal, attempting

6   to establish, via instant messaging services, a

7   Call Optimization Application (COA) channel

8   between a Multipoint Controller-Call

9   Optimization Application (MC-COA) and a Call

10   Optimization Application co-resident with the

11   first terminal (Terminal-COA).

1   41. The method of Claim 40, wherein said attempting

2 to establish, via instant messaging services, a Call

3 Optimization Application (COA) channel further comprises:

4   determining that the COA channel cannot be

5   established; and

6   informing the multipoint controller that Call

7   Optimization is unavailable, whereby

8   substantially backwards compatibility with

9   existing communications systems is achieved.

1   42. A system comprising:

2   means, responsive to a multipoint controller

3   receiving a request to extend an invitation to

4   an ongoing conference call to a first terminal,

5   for attempting to establish, via instant

6   messaging services, a Call Optimization

7   Application (COA) channel between a Multipoint

8   Controller-Call Optimization Application (MC-

9   COA) and a Call Optimization Application co-

10   resident with the first terminal (Terminal-

11   COA).

1   43.   The system of Claim 42, further comprising:

2   a network server computer having the system; and

3   said network server computer including at least one

4   processor and at least one memory.

1   44.   The system of Claim 42, wherein said means for

2   attempting to establish, via instant messaging services,

3   a Call Optimization Application (COA) channel further

4   comprises:

5   means for determining that the COA channel cannot be

6   established; and

7   means for informing the multipoint controller that

8   Call Optimization is unavailable, whereby

9   substantially backwards compatibility with

10   existing communications systems is achieved.

1   45.   A method for accepting an invitation to an

2   ongoing conference call, said method comprising:

3   receiving, with a Call Optimization Application co-

4   resident with a first terminal (Terminal-COA),

5   an invitation to the first terminal to join an

6   ongoing conference call over a Call

7   Optimization Application (COA) channel

8   established via instant messaging services; and

9   responding to the invitation to join in response to

10   human user input to an interface activated in

11   response to the invitation.

1   46.   The method of Claim 45, wherein said receiving,

2   with a Call Optimization Application co-resident with a

3   first terminal (Terminal-COA), an invitation to the first

4   terminal to join an ongoing conference call over a Call

5   Optimization Application (COA) channel established via

6   instant messaging services further includes:

7   receiving a token having at least one field selected

8   from the group comprising a token ID field, a

9   conference ID field, a network address field, a

10   password field, a call initiator field, and an

11   other conference call participants' names

12   field.

1   47. The method of Claim 45, wherein said receiving,

2   with a Call Optimization Application co-resident with a

3   first terminal (Terminal-COA), an invitation to the first

4   terminal to join an ongoing conference call over a Call

5   Optimization Application (COA) channel established via

6   instant messaging services further includes:

7   gathering cost information related to the first

8   terminal originating a media transport channel

9   with a multipoint controller; and

10   sending a message containing the cost information

11   from the Terminal-COA to a Multipoint-

12   Controller Call Optimization Application (MC-

13   COA) over the COA channel.

1   48. The method of Claim 45, wherein said responding

2   to the invitation to join in response to human user input

3   to an interface activated in response to the invitation

4   further includes:

5   sending a message containing the human user input

6   from the Terminal-COA to a Multipoint-

7   Controller Call Optimization Application (MC-

8   COA) over the COA channel.

1   49. The method of Claim 45, wherein said responding

2   to the invitation to join in response to human user input

3   to an interface activated in response to the invitation

4   further includes:

5   activating an interface which presents at least one
6   invitation option selected from the group
7   comprising accepting or rejecting an invitation
8   to join an ongoing conference call, accepting
9   the invitation to join the ongoing conference
10   call but rejecting an invitation to originate a
11   media transport channel, and accepting the
12   invitation to join the ongoing conference call
13   and accepting the invitation to originate the
14   media transport channel.

1   50.   The method of Claim 45, wherein said responding
2 to the invitation to join in response to human user input
3 to an interface activated in response to the invitation
4 further includes:
5   sending a message indicative of the human user input
6   from the Terminal-COA to a Multipoint
7   Controller-Call Optimization Application (MC-
8   COA) over the COA channel.

1   51.   The method of Claim 45, wherein said responding
2 to the invitation to join in response to human user input
3 to an interface activated in response to the invitation
4 further includes:
5   causing, with the Terminal-COA, the first terminal
6   to originate a media transport channel with a
7   multipoint controller and authenticate itself
8   as if it were a "meet-me" conference call, in
9   response to user input indicating that an
10   invitation to join an ongoing conference call
11   has been accepted and that a request that the
12   first terminal originate the media transport
13   channel has been accepted.

1   52. The method of Claim 51, further comprising:

2   the first terminal authenticating itself by

3   presenting token information, received by the

4   Terminal-COA from the MC-COA, to the multipoint

5   controller.

1   53. A system comprising:

2   means for receiving, with a Call Optimization

3   Application co-resident with a first

4   terminal (Terminal-COA), an invitation to

5   the first terminal to join an ongoing

6   conference call over a Call Optimization

7   Application (COA) channel established via

8   instant messaging services; and

9   means for responding to the invitation to join

10   in response to human user input to an

11   interface activated in response to the

12   invitation.

1   54. The system of Claim 53, further comprising:

2   a workstation computer having the system; and

3   said workstation computer having at least one

4   processor and at least one memory.

1   55. The system of Claim 53, wherein said means for

2   receiving, with a Call Optimization Application co-

3   resident with a first terminal (Terminal-COA), an

4   invitation to the first terminal to join an ongoing

5   conference call over a Call Optimization Application

6   (COA) channel established via instant messaging services

7   further includes:

8   means for receiving a token having at least one

9   field selected from the group comprising a

10   token ID field, a conference ID field, a

11   network address field, a password field, a call

12   initiator field, and an other conference call

13   participants' names field.

1   56. The system of Claim 53, wherein said means for

2   receiving, with a Call Optimization Application co-

3   resident with a first terminal (Terminal-COA), an

4   invitation to the first terminal to join an ongoing

5   conference call over a Call Optimization Application

6   (COA) channel established via instant messaging services

7   further includes:

8   means for gathering cost information related to the

9   first terminal originating a media transport

10   channel with a multipoint controller; and

11   means for sending a message containing the cost

12   information from the Terminal-COA to a

13   Multipoint-Controller Call Optimization

14   Application (MC-COA) over the COA channel.

1   57.   The system of Claim 53, wherein said means for

2   responding to the invitation to join in response to human

3   user input to an interface activated in response to the

4   invitation further includes:

5   means for sending a message containing the human

6   user input from the Terminal-COA to a

7   Multipoint-Controller Call Optimization

8   Application (MC-COA) over the COA channel.

1   58.   The system of Claim 53, wherein said means for

2   responding to the invitation to join in response to human

3   user input to an interface activated in response to the

4   invitation further includes:

5   means for activating an interface which presents at

6   least one invitation option selected from the

7   group comprising accepting or rejecting an

8   invitation to join an ongoing conference call,

9   accepting the invitation to join the ongoing

10   conference call but rejecting an invitation to

11   originate a media transport channel, and

12   accepting the invitation to join the ongoing

13   conference call and accepting the invitation to

14   originate the media transport channel.

1   59. The system of Claim 53, wherein said means for

2 responding to the invitation to join in response to human

3 user input to an interface activated in response to the

4 invitation further includes:

5   means for sending a message indicative of the human

6   user input from the Terminal-COA to a

7   Multipoint Controller-Call Optimization

8   Application (MC-COA) over the COA channel.

1   60. The system of Claim 53, wherein said means for

2 responding to the invitation to join in response to human

3 user input to an interface activated in response to the

4 invitation further includes:

5   means for causing, with the Terminal-COA, the first

6   terminal to originate a media transport channel

7   with a multipoint controller and authenticate

8   itself as if it were a "meet-me" conference

9   call, in response to user input indicating that

10   an invitation to join an ongoing conference

11   call has been accepted and that a request that

12   the first terminal originate the media

13   transport channel has been accepted.

1   61. The system of Claim 60, further comprising:

2   means for the first terminal to authenticate itself

3   by presenting token information, received by

4   the Terminal-COA from the MC-COA, to the

5   multipoint controller.

1   62.   A program product comprising:

2   signal bearing media bearing program code,

3   responsive to a multipoint controller receiving

4   a request to extend an invitation to an ongoing

5   conference call to a first terminal, for:

6   establishing a Call Optimization Application

7   (COA) channel between a Multipoint

8   Controller-Call Optimization Application

9   (MC-COA) and a Call Optimization

10   Application co-resident with the first

11   terminal (Terminal-COA) following an

12   address resolution;

13   exchanging cost information data between the

14   Terminal-COA and the MC-COA;

15   determining an optimal media transport channel

16   origination strategy in response to the

17   cost information data;

18   sending the Terminal-COA an invitation to join

19   the conference call, said invitation

20   having associated information consonant

21   with the optimal media transport channel

22   origination strategy;

23   receiving, with the MC-COA, a message from the

24   Terminal-COA containing human user input

25   received in response to the invitation to

26   join; and

27   responding to the message containing the human

28   user input.

1   63.   The program product of Claim 62, wherein said

2   signal bearing media further includes recordable media.

1   64.   The program product of Claim 62, wherein said

2   signal bearing media further includes transmission media.

1   65.   A program product comprising:

2   signal bearing media bearing program code,

3   responsive to a multipoint controller receiving

4   a request to extend an invitation to an ongoing

5   conference call to a first terminal, for

6   attempting to establish a Call Optimization

7   Application (COA) channel between a Multipoint

8   Controller-Call Optimization Application (MC-

9   COA) and a Call Optimization Application co-

10   resident with the first terminal (Terminal-

11   COA).

1   66.   The program product of Claim 65, wherein said

2   signal bearing media is selected from the group

3   comprising recordable media and transmission media.

1   67.   A program product comprising:

2   signal bearing media bearing

3   program code for receiving, with a Call

4   Optimization Application co-resident with

5   a first terminal (Terminal-COA), an

6   invitation to the first terminal to join

7   an ongoing conference call over a Call

8   Optimization Application (COA) channel;

9   and

10   program code for responding to the invitation

11   to join in response to human user input to

12   an interface activated in response to the

13   invitation.

1   68.   The program product of Claim 67, wherein said

2 signal bearing media further includes:

3   said signal bearing media selected from the group

4   comprising recordable media and transmission

5   media.